

What Is Claimed Is:

1. A compound composed of 11-24 amino acid residues  
5 comprising the amino acid sequence:

$A_1-A_2-A_3-C_4-C_5-C_6-A_7-C_8-A_9-A_{10}-A_{11}-A_{12}-C_{13}-A_{14}-C_{15}-C_{16}-C_{17}-A_{18}$

or a pharmaceutically acceptable salt or an N-terminal  
10 acylated or C-terminal amidated or esterified form thereof,  
said compound being either in a linear or in a disulfide-  
bridged form, wherein:

each of  $A_1-A_3$  is independently present or not present,  
and if present each is independently a basic, hydrophobic,  
15 polar/large, or small amino acid;

each of  $C_4$  and  $C_{17}$  is independently present or not  
present, and if present each is independently selected from  
the group consisting of cysteine, homocysteine,  
penicillamine, a basic amino acid, a hydrophobic amino acid,  
20 a polar/large amino acid and a small amino acid;

$C_5$  is selected from the group consisting of cysteine,  
homocysteine, penicillamine, a basic amino acid, a  
hydrophobic amino acid, a polar/large amino acid and a small  
amino acid;

25 each of  $C_6$ ,  $C_8$ ,  $C_{13}$  and  $C_{15}$  is independently selected from  
the group consisting of cysteine, homocysteine,  
penicillamine, a basic amino acid, a hydrophobic amino acid,  
a polar/large amino acid, a small amino acid and an acidic  
amino acid;

30

C<sub>16</sub> is selected from the group consisting of cysteine, homocysteine, penicillamine, a hydrophobic amino acid or a small amino acid;

each of A<sub>7</sub> and A<sub>14</sub> is independently a hydrophobic or a  
5 small amino acid;

A<sub>9</sub>-A<sub>12</sub> taken together are capable of effecting a  $\beta$ -turn when contained in the compound and at least one of A<sub>9</sub>-A<sub>12</sub> is a basic amino acid;

A<sub>18</sub> is present or not present, and if present, is a  
10 basic, hydrophobic, polar/large, or small amino acid;

at least about 15% to about 50% of the amino acid residues composing said compound are basic amino acids; and

said compound has a net positive charge of at least +1 at physiological pH;

15 with the provisos that: (i) when one of C<sub>4</sub>, C<sub>5</sub> or C<sub>6</sub> is cysteine, homocysteine or penicillamine, the other two are other than cysteine, homocysteine and penicillamine;

(ii) when one of C<sub>15</sub>, C<sub>16</sub> or C<sub>17</sub> is cysteine, homocysteine or penicillamine, the other two are other than cysteine,  
20 homocysteine and penicillamine;

and (iii) at least one of C<sub>4</sub>, C<sub>5</sub>, C<sub>16</sub> or C<sub>17</sub> is cysteine, homocysteine or penicillamine.

2. The compound of claim 1 which comprises two  
25 disulfide bridges.

3. The compound of Claim 2, wherein one of said disulfide bridges links C<sub>5</sub>-C<sub>16</sub> and the other links C<sub>8</sub>-C<sub>13</sub>.

30

4. The compound of Claim 3 which is selected from the group consisting of:



R-G-G-X-C-L-Y-C-X  
 |                   | R  
 |                   | R  
 R-G-C-V-V-C-F

(SEQ ID NO:112);

5 R-G-G-R-C-V-Y-C-R  
 |                   | X  
 |                   | R  
 R-G-C-V-V-C-F

(SEQ ID NO:113);

10 R-G-G-R-C-L-Y-C-R  
 |                   | K  
 |                   | K  
 R-G-C-V-V-C-W

(SEQ ID NO:114);

R-G-G-R-C-L-Y-C-R  
 |                   | X  
 |                   | R  
 R-G-C-V-V-C-Y

(SEQ ID NO:115);

15 R-G-S-G-C-L-Y-C-R  
 |                   | R  
 |                   | K  
 R-G-C-V-V-C-W

(SEQ ID NO:116);

20 R-A-T-R-C-I-F-C-R  
 |                   | R  
 |                   | R  
 R-G-C-V-V-C-F

(SEQ ID NO:117);

R-G-G-K-C-V-Y-C-R  
 |                   | X  
 |                   | R  
 R-G-C-V-V-C-F

(SEQ ID NO:118);

25 R-A-T-R-C-I-F-C-r  
 |                   | R  
 |                   | R  
 r-G-C-V-V-C-F

(SEQ ID NO:119);

30 R-G-G-K-C-V-Y-C-R  
 |                   | x  
 |                   | R  
 R-G-C-V-V-C-F

(SEQ ID NO:120);

r-g-g-r-c-l-y-c-r  
 |            |  
 r-g-c-v-v-c-f

(SEQ ID NO:121);

5    r-g-g-r-c-l-y-c-r  
      |            |  
      c-v-i-c-f

(SEQ ID NO:122);

10    r-g-g-g-c-l-y-c-r  
        |            |  
        r-g-c-v-v-c-f

(SEQ ID NO:123);

      r-g-g-r-c-l-y-c-r  
       |            |  
       r-g-c-v-f-c-i

(SEQ ID NO:124);

15        and the C-terminal amidated forms thereof, wherein X is Har, x is D-Har, lower case letters represent D-amino acids and lines between C or c residues represent disulfide linkages.

20        5.    The compound of Claim 2, wherein one of said disulfide bridges links C<sub>5</sub>-C<sub>8</sub> and the other links C<sub>13</sub>-C<sub>16</sub>.

25        6.    The compound of Claim 5 which is selected from the group consisting of:

                
 RGGRCLYCRRRFCVVCGR

(SEQ ID NO:125);

30                        
 RGGRCLYCRRRFCIVCG

(SEQ ID NO:126);

	RGGGCLYCRRRFCVVCGR	(SEQ ID NO:127);
5	RGGRCLYCRGWICFVCGR	(SEQ ID NO:128);
	RGGRCLYCRPRFCVVCGR	(SEQ ID NO:129);
10	RGGRCVYCRRRFCVVCGR	(SEQ ID NO:130);
	KGGRCLYCRRRFCVVCGR	(SEQ ID NO:131);
15	RGGXCLYCRRRFCVVC	(SEQ ID NO:132);
	RGGXCLYCXRRFCVVCGR	(SEQ ID NO:133);
20	RGGRCVYCRXRFCVVCGR	(SEQ ID NO:134);
	RGGRCLYCRKKWCVVCGR	(SEQ ID NO:135);
25	RGGRCLYCRXRYCVVCGR	(SEQ ID NO:136);
30	RSGCLYCRRKWCVVCGR	(SEQ ID NO:137);

RATRCIFCRRRFCVVCGR

(SEQ ID NO:138);

5

RGGKCVYCRXRFCVVCGR

(SEQ ID NO:139);

RATRCIFCrRRRFCVVCGr

(SEQ ID NO:140);

10

RGGKCVYCRxRFCVVCGR

(SEQ ID NO:141);

rggrclycrrrrfcvvcgr

(SEQ ID NO:142);

15

rggrclycrrrrfcivcg

(SEQ ID NO:143);

rgggclycrrrrfcvvcgr

(SEQ ID NO:144);

20

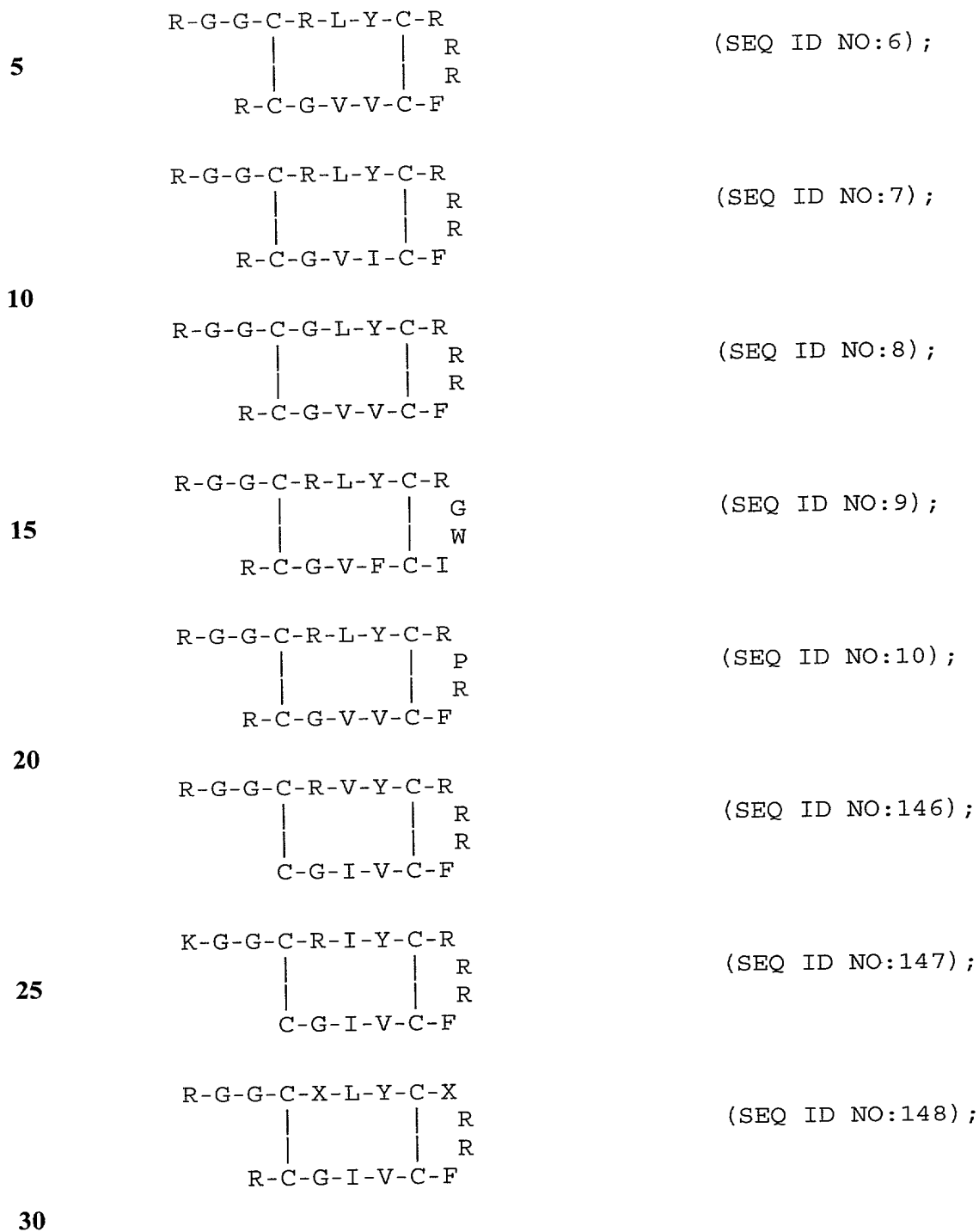
RGGRCLYCRGWICFVCGR

(SEQ ID NO:145);

and the C-terminal amidated forms thereof, wherein X is  
25 Har, x is D-Har, lower case letters represent D-amino acids  
and lines between C and c residues represent disulfide  
linkages.

7. The compound of Claim 2, wherein one of said  
30 disulfide bridges links C<sub>4</sub>-C<sub>17</sub> and the other links C<sub>8</sub>-C<sub>13</sub>.

8. The compound of Claim 7 which is selected from the group consisting of:





R-G-G-C-R-V-Y-C-R  
 | | X  
 | | R  
 R-C-G-V-V-C-F

(SEQ ID NO:149);

5

R-G-G-C-R-L-Y-C-R  
 | | K  
 | | K  
 R-C-G-V-V-C-W

(SEQ ID NO:150);

R-G-G-C-R-L-Y-C-R  
 | | X  
 | | R  
 R-C-A-V-V-C-Y

(SEQ ID NO:151);

10

R-G-S-C-G-L-Y-C-R  
 | | R  
 | | K  
 R-C-G-V-V-C-W

(SEQ ID NO:152);

R-A-T-C-R-I-F-C-R  
 | | R  
 | | R  
 R-C-G-I-V-C-F

(SEQ ID NO:153);

15

R-G-G-C-K-V-Y-C-R  
 | | X  
 | | R  
 R-C-G-I-V-C-F

(SEQ ID NO:154);

20

R-A-T-C-R-I-F-C-r  
 | | R  
 | | R  
 r-C-G-V-V-C-F

(SEQ ID NO:155);

R-G-G-C-K-V-Y-C-R  
 | | x  
 | | R  
 R-C-G-V-V-C-F

(SEQ ID NO:156);

25

r-g-g-c-r-l-y-c-r  
 | | r  
 | | r  
 r-c-g-v-v-c-f

(SEQ ID NO:157);

30

r-g-g-c-r-l-y-c-r  
 |                   | r  
 |                   | r  
 c-g-v-i-c-f

(SEQ ID NO:158);

5      r-g-g-c-r-l-y-c-r  
       |                   | r  
       |                   | r  
       c-g-v-i-c-f

(SEQ ID NO:159);

10     r-g-g-c-r-l-y-c-r  
       |                   | g  
       |                   | w  
       r-c-g-v-f-c-i

(SEQ ID NO:160);

R-G-G-C-L-R-Y-C-R  
 |                   | P  
 |                   | R  
 R-C-V-R-V-C-F

(SEQ ID NO:161);

15     R-G-V-C-L-R-Y-C-R  
       |                   | G  
       |                   | R  
       R-C-L-R-V-C-F

(SEQ ID NO:162);

20     R-R-G-V-C-L-R-Y-C-R  
       |                   | G  
       |                   | R  
       R-F-C-L-R-V-C-F

(SEQ ID NO:163);

R-W-R-V-C-L-R-Y-C-R  
 |                   | G  
 |                   | R  
 R-L-C-L-R-V-C-F

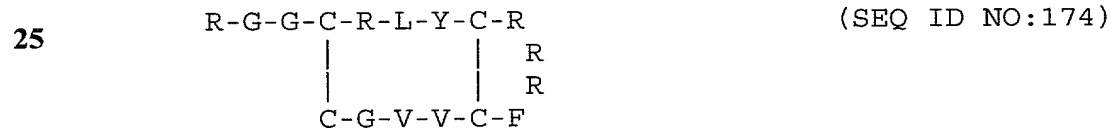
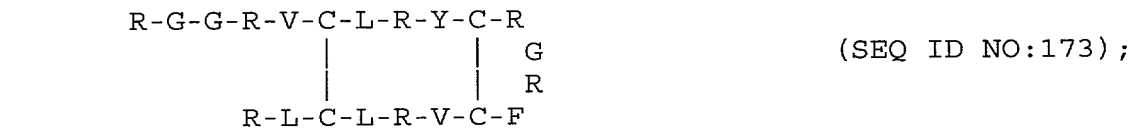
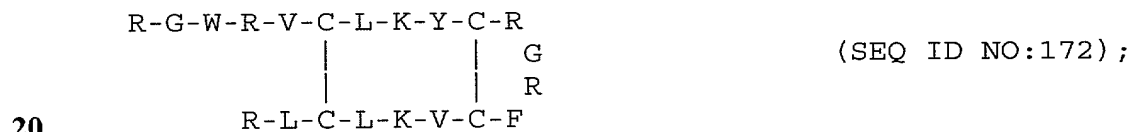
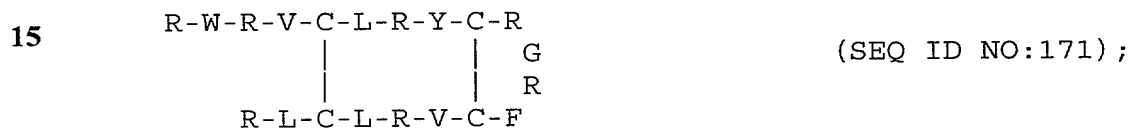
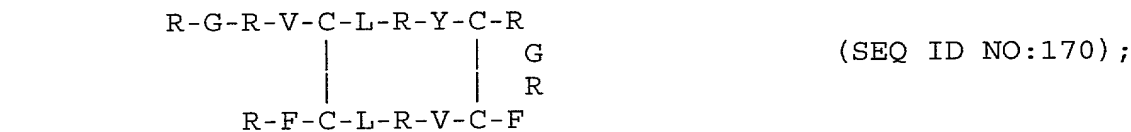
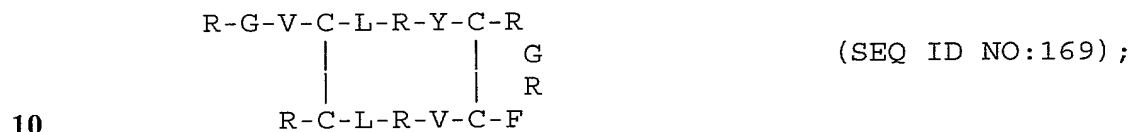
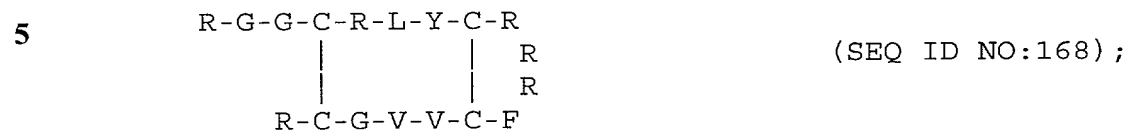
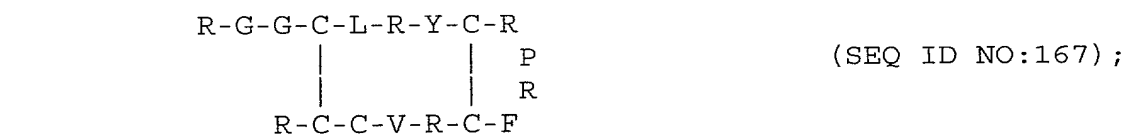
(SEQ ID NO:164);

25     R-G-W-R-V-C-L-K-Y-C-R  
       |                   | G  
       |                   | R  
       R-L-C-L-K-V-C-F

(SEQ ID NO:165);

30     R-G-G-R-V-C-L-R-Y-C-R  
       |                   | G  
       |                   | K  
       R-L-C-L-R-V-C-F

(SEQ ID NO:166);



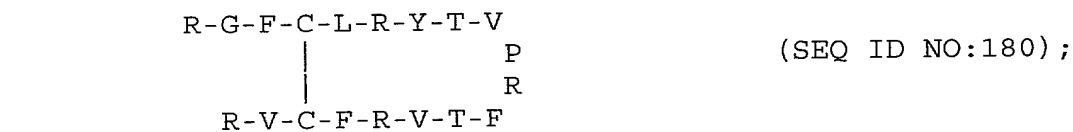
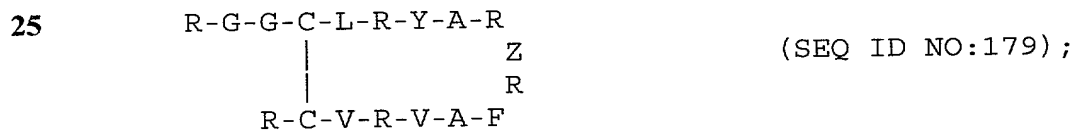
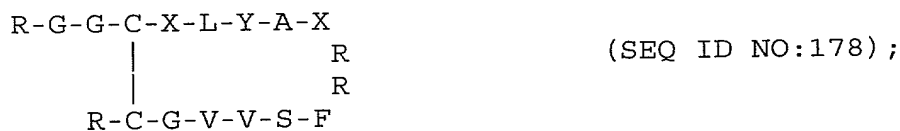
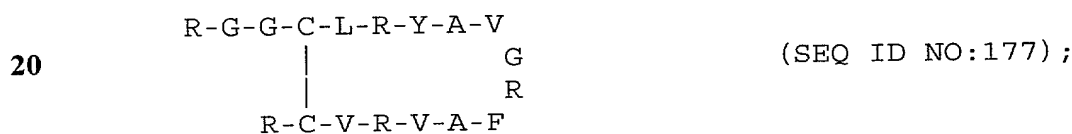
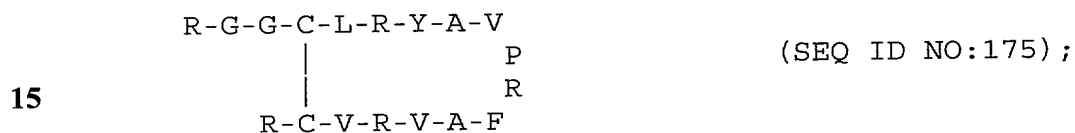
and the C-terminal amidated forms thereof, wherein X is Har, x is D-Har, lower case letters represent D-amino acids

and lines between C or c residues represent disulfide linkages.

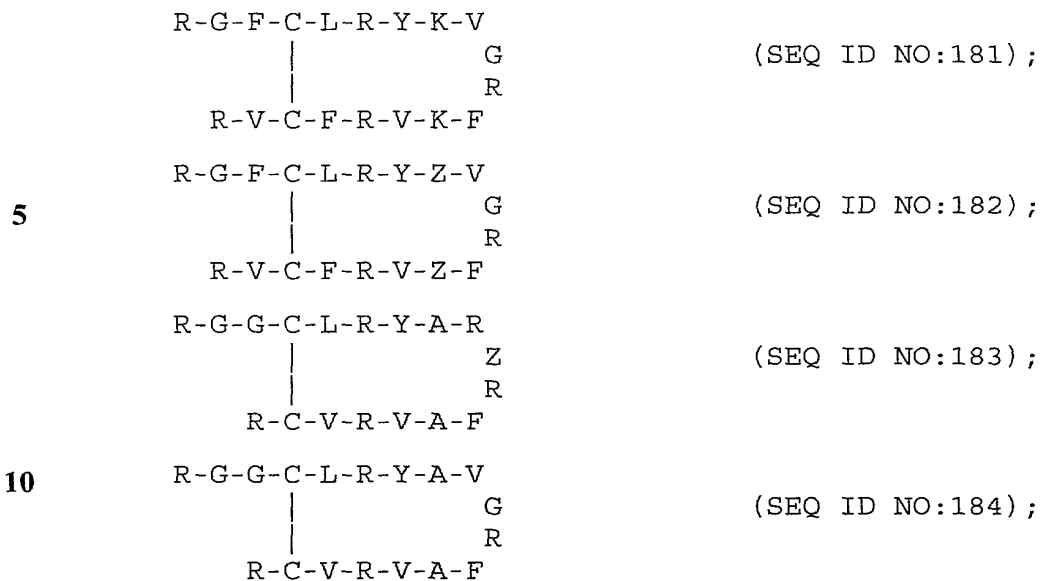
9. The compound of Claim 1 which comprises one  
5 disulfide bridge.

10. The compound of Claim 9 in which said disulfide  
bridge links C<sub>4</sub>-C<sub>17</sub>.

10 11. The compound of Claim 10 which is selected from the  
group consisting of:



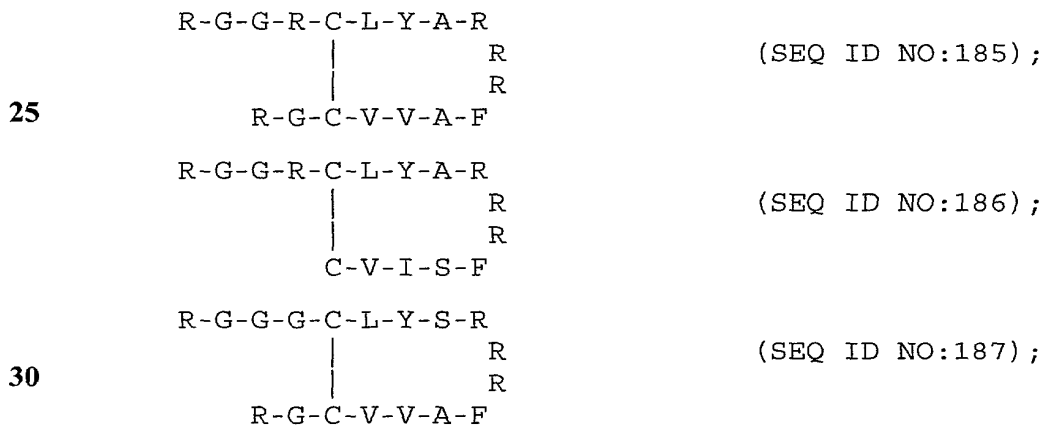
Pub. No. 4,413,411



15 and the C-terminal amidated forms thereof, wherein X is Har, Z is MeGly and lines between C residues represent disulfide linkages.

12. The compound of Claim 9 in which said disulfide bridge links C<sub>5</sub>-C<sub>16</sub>.

20 13. The compound of Claim 12 which is selected from the group consisting of:



	R-G-G-R-C-L-Y-A-R		(SEQ ID NO:188);
		R	
	C-V-V-G-F	R	
5	K-G-G-R-C-L-Y-A-R		(SEQ ID NO:189);
		R	
	C-V-V-I-F	R	
	R-G-G-X-C-L-Y-A-X		(SEQ ID NO:190);
		R	
	R-G-C-V-V-S-F	R	
10	R-G-G-R-C-L-Y-S-R		(SEQ ID NO:191);
		K	
	R-G-C-S-V-A-W	K	
	R-G-G-R-C-L-Y-S-R		(SEQ ID NO:192);
		X	
15	R-G-C-I-V-S-Y	R	
	R-A-T-R-C-I-F-S-R		(SEQ ID NO:193);
		R	
	R-G-C-V-V-S-F	R	
	R-G-G-K-C-V-Y-G-R		(SEQ ID NO:194);
		X	
20	R-G-C-V-V-S-F	R	
	R-A-T-R-C-I-F-G-r		(SEQ ID NO:195);
		R	
	r-G-C-V-V-G-F	R	
25	R-G-G-K-C-V-Y-L-R		(SEQ ID NO:196);
		x	
	R-G-C-V-V-L-F	R	
	R-G-G-R-C-V-F-L-R		(SEQ ID NO:197);
		P	
	R-G-C-V-V-G-I	R	
30			

and the C-terminal amidated forms thereof, wherein X is Har, x is D-Har, lower case letters represent D-amino acids and lines between C residues represent disulfide linkages.

5        14. The compound of Claim 9 in which the disulfide bridge links C<sub>8</sub> and C<sub>13</sub>.

15. The compound of Claim 1 which is in the linear form.

10

16. The compound of Claim 1 in which at least one of A<sub>1</sub>, A<sub>2</sub> or A<sub>3</sub> is not present.

15        17. The compound Claim 1 in which A<sub>1</sub>, A<sub>2</sub> and A<sub>3</sub> are not present.

18. The compound of Claim 1 in which at least one of A<sub>1</sub>, A<sub>2</sub> or A<sub>3</sub> is a hydrophobic amino acid.

20        19. The compound of Claim 1 in which each of C<sub>5</sub> and C<sub>16</sub> is independently selected from the group consisting of cysteine, homocysteine, penicillamine, I, V, L, NLe, W, Y, F, A, S, G and T.

25        20. The compound of Claim 1 in which each of C<sub>4</sub> and C<sub>17</sub> is independently selected from the group consisting of cysteine, homocysteine, penicillamine, I, V, L, NLe, W, Y, F, A, S, G and T.

30

21. The compound of Claim 1 in which each of A<sub>7</sub> and A<sub>14</sub> is independently selected from the group consisting of I, V, L, NLe, W, Y, F, A, S, G and T.

5        22. The compound of Claim 1 in which one of A<sub>9</sub> or A<sub>12</sub> is R, K, Har, Orn or H and the other is I, V, L, NLe, W, Y, F, A, S, G or T.

23. The compound of Claim 1 in which all amino acids  
10 are in the D-configuration.

24. The compound of Claim 1 in which A<sub>7</sub> and A<sub>14</sub> are each independently a hydrophobic amino acid.

15        25. The compound of Claim 1 in which A<sub>9</sub> or A<sub>12</sub> is a hydrophobic amino acid or a small amino acid.

26. The compound of Claim 1 in which A<sub>10</sub> and A<sub>11</sub> are each independently selected from the group consisting of proline,  
20 a basic amino acid, a hydrophobic amino acid and a small amino acid.

27. The compound of Claim 1 in which each of C<sub>8</sub> and C<sub>13</sub> is independently cysteine, homocysteine or penicillamine.

25

28. The compound of Claim 1 in which A<sub>9</sub>-A<sub>10</sub>-A<sub>11</sub>-A<sub>12</sub> is selected from the group consisting of: R-R-R-F, R-G-W-I, R-P-R-F, X-R-R-F, R-X-RF, R-K-K-W, R-X-R-Y, R-R-K-W, r-R-R-F, R-x-R-F, R-G-R-F, C-R-G-R, Y-C-G-R, V-P-R-F, K-P-K-F,

30



V-G-R-F, R-P-R-I and R-Z-R-F, where X is Har, x is D-Har, Z is MeGly and r is D-Arg.

29. The compound of Claim 1 which is in the linear or  
5 disulfide-bridged form and which is selected from the group consisting of:

	RGGRCLYCRRRFCVVCGR	(SEQ ID NO:11);
	RGGCRLYCRRRFCVVGCR	(SEQ ID NO:12);
	RGGRCLYCRRRFCIVCG	(SEQ ID NO:13);
10	RGGCRLYCRRRFCIVGC	(SEQ ID NO:14);
	RGGGCLYCRRRFCVVCGR	(SEQ ID NO:15);
	RGGCGLYCRRRFCVVGCR	(SEQ ID NO:16);
	RGGRCLYCRGWICFVCGR	(SEQ ID NO:17);
	RGGCRLYCRGWICFVGCR	(SEQ ID NO:18);
15	RGGRCLYCRPRFCVVCGR	(SEQ ID NO:19);
	RGGCRLYCRPRFCVVGCR	(SEQ ID NO:20);
	RGGRCVYCRRRFCVVCGR	(SEQ ID NO:21);
	RGGRCVYCRRRFCVIGC	(SEQ ID NO:22);
	KGGRCLYCRRRFCVVCGR	(SEQ ID NO:23);
20	KGGCRIYCRRRFCVIGC	(SEQ ID NO:24);
	RGGXCLYCRRRFCVVC	(SEQ ID NO:25);
	RGGCXLYCRRRFCVIC	(SEQ ID NO:26);
	RGGXCLYCXRRFCVVCGR	(SEQ ID NO:27);
	RGGCXLYCXRRFCVIGCR	(SEQ ID NO:28);
25	RGGRCVYCRXRFCVVCGR	(SEQ ID NO:29);
	RGGRCVYCRXRFCVVGCR	(SEQ ID NO:30);
	RGGRCLYCRKKWCVVCGR	(SEQ ID NO:31);
	RGGCRLYCRKKWCVVGCR	(SEQ ID NO:32);
	RGGRCLYCRXRYCVVCGR	(SEQ ID NO:33);
30	RGGCRLYCRXRYCVVACR	(SEQ ID NO:34);

RGSCGLYCRRKWCVVGCR (SEQ ID NO:36);

RATRCIFCRRRFCVVCGR (SEQ ID NO:37);

RATCRIFCRRRFCVIGCR (SEQ ID NO:38);

RGGKCVYCRXRFCVVCGR (SEQ ID NO:39);

RGGCKVYCRXRFCVIGCR (SEQ ID NO:40);

RATRCIFCrRRFCVVCGr (SEO ID NO:41);

RATCRIFCrRRFCVVGCr (SEQ ID NO:42);

RGGKCVYCRxRFCVVCGR (SEQ ID NO:43);

10

RGGCKVYCRxRFCVVGCR (SEQ ID NO:44);

rggrclycrrrrfcvvcgr (SEQ ID NO:45);

rqgcrlycrrrrfcvvqcr (SEQ ID NO:46);

rqgrclycrrrrfcivcg (SEQ ID NO:47);

rqgcrlycrrrfcivgc (SEQ ID NO:48);

15

rqggclycrrrrfcvvcgr (SEQ ID NO:49);

rqgcglycrrrrfcvvqcr (SEQ ID NO:50);

rqgrclycrqwicfvcqr (SEQ ID NO:51);

rqgcrlycrqwicfvqcr (SEQ ID NO:52);

RGGCLRYCRPRFCVRVCR (SEQ ID NO:53);

20

RGGCRLYCRRRFCVVGCR (SEQ ID NO:54);

RGVCLRYCRGRFCVRLCR (SEQ ID NO:55);

RGRVCLRYCRGRFCVRLCFR (SEQ ID NO:56);

RWRVCLRYCRGRFCVRLCLR (SEQ ID NO:57);

RGWRVCLKYCRGRFCVKLCLR (SEQ ID NO:58);

25

RGGRVCLRYCRGKFCVRLCLR (SEQ ID NO:59);

RGGRCLYARRRFAVVCGR (SEQ ID NO:60);

RGGRCLYARRRFSIVC (SEQ ID NO:61);

RGGGCLYSRRRFAVVCGR (SEQ ID NO:62);

RGGRCLYARRRFGVVC (SEQ ID NO:63);

30

KGGRCLYVRRRFIVVC (SEQ ID NO:64);

	RGGXCLYARRRFVGC	(SEQ ID NO:65) ;
	RGGXCLYAXRRFSVVC	(SEQ ID NO:66) ;
	RGGCXLYAXRRFSVVGCR	(SEQ ID NO:67) ;
	RGGRVCYVRXRFLVCVGR	(SEQ ID NO:68) ;
5	RGGRCLYSRKKWAVSCGR	(SEQ ID NO:69) ;
	RGGRCLYSRXRYSVICGR	(SEQ ID NO:70) ;
	RSGSCIYCRRKWGVVGC	(SEQ ID NO:71) ;
	RATRCIFSRRRFSVVCGR	(SEQ ID NO:72) ;
	RGGKCVYGRXRFSVVCGR	(SEQ ID NO:73) ;
10	RATRCIFGrRRFGVVCGr	(SEQ ID NO:74) ;
	RGGKCVYLRxRFLVVCGR	(SEQ ID NO:75) ;
	RGGRCVFLRPRIGVVCGR	(SEQ ID NO:76) ;
	RGGCLRYAVPRFAVRVCR	(SEQ ID NO:77) ;
	RGGCLRYTKPKFTVRVCR	(SEQ ID NO:78) ;
15	RGGCLRYAVGRFAVRVCR	(SEQ ID NO:79) ;
	RGGCLRYARZRFAVRVCR	(SEQ ID NO:80) ;
	RGFCLRYTVPRFTVRFCVR	(SEQ ID NO:81) ;
	RGFCLRYKVGRFKVRFCVR	(SEQ ID NO:82) ;
	RGFCLRYZVGRFZVRFCVR	(SEQ ID NO:83) ;
20	RGGCLRYARZRFAVRVCR	(SEQ ID NO:84) ;
	RGGCLRYAVGRFAVRVCR	(SEQ ID NO:85) ;
	RGGRCLYCRRRFCVVGC	(SEQ ID NO:86) ;
	RGGCRLYCRRRFCVVCGR	(SEQ ID NO:87) ;
	RGGRCLYCRRRFCVCVGR	(SEQ ID NO:88) ;
25	RGGCRLYCRRRFCVCVGR	(SEQ ID NO:89) ;
	RGGRLCYCRRRFCVVCGR	(SEQ ID NO:90) ;
	RGGRLCYCRRRFCVVGC	(SEQ ID NO:91) ;
	RGGCRLYCRRRFCVVGC	(SEQ ID NO:92) ;
	RGGRCLYCRRRFCVVGC	(SEQ ID NO:93) ;
30	RGGCRLYCRRRFCVVC	(SEQ ID NO:94) ;

5 RGGRCLYCRRRFCVVCVG (SEQ ID NO:95);  
 RGGCRLYCRRRFCVVCVG (SEQ ID NO:96);  
 RGGRLCYCRRRFCVVCVG (SEQ ID NO:97);  
 RGGRLCYCRRRFCVVGC (SEQ ID NO:98);  
 RGGGCLYCRRRFCVVGCR (SEQ ID NO:99);  
 RGGGCLYCRRRFCVCVGR (SEQ ID NO:100);  
 RGGGCLYCRRRFCVCVGR (SEQ ID NO:101);  
 RGGGLCYCRRRFCVVCGR (SEQ ID NO:102);  
 RGGGLCYCRRRFCVVGCR (SEQ ID NO:103);

10 and the C-terminal amidated and N-terminal acylated  
 forms thereof, wherein X is Har, x is D-Har, Z is MeGly and  
 lower case letters represent D-amino acids.

15 30. A pharmaceutical composition comprising a compound  
 according to Claim 1 and a pharmaceutically acceptable  
 excipient.

20 31. A method of inhibiting the growth of a microbe or  
 the replication of a virus which comprises the step of  
 contacting said virus or said microbe with an amount of a  
 compound according to Claim 1 effective to inhibit said  
 growth or said replication.

25 32. The method of Claim 31 in which the microbe is a  
 bacteria.

30 33. The method of Claim 32 in which the bacteria is  
 selected from the group consisting of E. coli, L.  
 monocytogenes, B. subtilis, S. typhimurium, S. aureus and P.  
 aeruginosa.

34. The method of Claim 31 in which the microbe or virus is a sexually-transmitted microbe or virus.

35. The method of Claim 34 in which the sexually-  
5 transmitted microbe or virus is selected from the group consisting of HIV-1, C. trachomatis, T. pallidum, N. gonorrhoeae, T. vaginalis, HSV-1, HSV-2, H. ducreyi and human papilloma virus.

10 36. The method of Claim 31 in which the microbe or virus is HIV.

37. The method of Claim 31 in which the microbe or virus is methicillin-resistant S. aureus (MRSA) or  
15 vancomycin-resistant E. faecalis (VREF).

38. A method to inactivate the endotoxin of gram-negative bacteria, which method comprises contacting said endotoxin with an amount of a compound according to Claim 1  
20 effective to inactivate said endotoxin.

39. A method to treat or prevent a microbial or viral infection in a subject, which method comprises administering to a subject in need of such treatment an amount of a  
25 compound according to Claim 1 effective to ameliorate said infection in the subject.

40. The method of Claim 39 in which the infection is a bacterial infection.

30

41. The method of Claim 40 in which the bacteria is selected from the group consisting of E. Coli, L. monocytogenes, B. subtilis, S. typhimurium, S. aureus and P. aeruginosa.

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42. The method of Claim 39 in which the infection is caused by a sexually-transmitted pathogen.

43. The method of Claim 42 in which the sexually-  
10 transmitted pathogen is selected from the group consisting of HIV-1, C. trachomatis, T. pallidum, N. gonorrhoeae, T. vaginalis, HSV-1, HSV-2, H. ducreyi and human papilloma virus.

15 44. The method of Claim 39 in which the infection is an HIV infection.

45. The method of Claim 39 in which the infection is a methicillin-resistant S. aureus (MRSA) or vancomycin-  
20 resistant E. faecalis (VREF) infection.

46. The method of Claim 39 in which the compound is administered topically.

25 47. The method of Claim 39 in which the compound is administered prophylactically.

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